

ABSTRACT:

The invention relates to a speech recognition system and a method of calculating iteration values for free parameters $\lambda_{\alpha}^{\text{ortho}(n)}$ of a maximum-entropy speech model MESM with the aid of the generalized-iterative scaling training algorithm in a computer-supported speech recognition system in accordance with the formula

5 $\lambda_{\alpha}^{ortho(n+1)} = G(\lambda_{\alpha}^{ortho(n)}, m_{\alpha}^{ortho}, \dots)$, where n is an iteration parameter, G a mathematical function, α an attribute in the MESM and m_{α}^{ortho} a desired orthogonalized boundary value in the MESM for the attribute α . It is an object of the invention to further develop the system and method so that they make a fast computation of the free parameters λ possible without a change of the original training object. According to the invention this object is achieved in
10 that the desired orthogonalized boundary value m_{α}^{ortho} is calculated by a linear combination of the desired boundary value m_{α} with desired boundary values m_{β} from attributes β that have a larger range than the attribute α . m_{α} and m_{β} are then desired boundary values of the original training object.